

How many climate change sceptics does it take to change a light bulb? None, its too early to say if the light bulb needs changing. Now, while it is easy to make jokes about climate change, the only real joke would be the failure of this bill. Everyone, including the Federal government, has a role to play in alleviating to the best of our abilities the natural disasters facing our fellow Americans. And passing this legislation is one step towards dealing effectively with the massive droughts plaguing our nation.

Desalination is a sustainable alternative source of water, something we need direly. According to Sciencing, desalination makes water available in areas with limited sources of fresh water. It provides a reliable and safe supply of water to such communities, as seen in plants like the Kurnell Desalination plant in Sydney Australia, which provides 250 megaliters of water per day and contributes 15 percent of the current water supply to Sydney. Plants like the Aruba Island Desalination plant produce 11.1 million gallons of fresh water daily. Along with being reliable and effective, desalination might soon become necessary for some communities, such as those around Lake Powell and Lake Mead. Those lakes jointly supply water to more than 25 million people, but have a 50 percent chance of running dry by 2021, according to Sciencing. Aurecon's Jonathon Blesing has further discussed the importance of desalination as alternatives like dams are very damaging to the environment and options like rivers and lakes are dependent on the climate. Regardless of whether it's ideal, we must face the fact that desalination is becoming less of an option and more of a necessity in todays climate, and the sooner we implement it the sooner we can work towards improving it, and the sooner we can reap its benefits.

Although the negation has brought up some valid points, especially in regards to environmental impact of desalination plants, there are effective ways to minimize damage to the environment. According to Aurecon, the low velocity at the intake entry, a recent innovation, minimizes the entrapment of fish larvae and otherwise reduces the negative impact of desalination on local fish. Additionally, locating the intake head away from the reefs or nurseries substantially reduces impact on the local fish in the region. The author has brought up how brine, the waste product from this process, which can admittedly be harmful to the environment, can be utilized, and given it's importance I would like to elaborate on this subject. According to the

Scientific American, brine can be used in the Solvay process to store cO2. Furthermore, Desalitech demonstrates how brine can be used as irrigation water or a de-icing agent. While not a perfect solution, there is already a lot of promise within innovations for dealing with the few drawbacks of desalination, and the research grants allocated in this bill can further that.

Frances Beinecke said it best when he stated that “California's drought affects everyone in the state, from farmers to fishermen, business owners to suburban residents, and everyone has a role to play in using precious water resources as wisely and efficiently as possible.” Passing this bill is our role. And droughts are just the start. With the type of climate change we are dealing with, things will only get worse. We’ve already experienced its effects, through the multitude of extreme weather this past year, and it would be a failure on our part to treat 2017 as a fluke. While desalination is not an immediate fix, droughts like what we are experiencing now will happen again, and when they do we will have the means to prevent them from being catastrophic. There will be time to research better ways of dealing with the waste associated with this process, there will be time to deal with the financial effects of passing this legislation, but if we negate, we risk our options drying up completely. So it is with the future in mind that I implore you to stand with me in affirmation.